

CLAIMS

Patent
1. - Mechanism for adjustment of hinged elements
that planned to be applicable in the angular adjustment of
5 a movable or hinged item with respect to a fixed structure
or item, such as could be the armrests of a car,
distinctive because it is essentially formed by two parts
(1-1'-1'') and (2-2'-2'') preferably discoidal and mounted
on a common axle (3), the parts (1-1'-1'') and (2-2'-2'')
10 each being equipped with opposing cogs (4) that tend to
engage permanently with each other; being intended that the
discoidal part (2-2'-2'') acts as a crown and is welded to
the structure or fixed item in which it is applied, while
the discoidal part (1-1'-1'') acts as a ratchet and is
positioned on the axle (3) with ability to move axially,
15 between limits set by a limit plate(6) positioned on the
axle (3) and an external limit disk (7) that in turn forms
a support for a spring (8) that tends to continuously push
the discoidal part acting as a ratchet (1-1'-1'') against
the discoidal part acting as a crown (2-2'-2'');
20 furthermore with the distinction that between the ratchet
and crown a controlling part(9-9'-9'') of a separator that
allows the disengaging of the cogs (4) of the ratchet and
crown to permit the tilting of the hinged part in the
25 opposite sense to folding.

2. - Mechanism of adjustment of hinged elements,
according to claim 1, characterised in that the discoidal
part acting as a ratchet (1) has a controlling section of
30 a reduced area (5) in which the part acting as separator is
capable of lodging (9) and to keep the teeth (4) of the
ratchet (1) and crown (2) separate; being planned that this
separator (9) be externally guided over the crown and
pushed continuously by a spring (10).

3. - Mechanism of adjustment of hinged elements, according to previous claims, characterised in that the cogs (4) of the ratchet (1) and crown (2) are located on a sector of the perimeter of the opposing faces of both parts.

4. - Mechanism of adjustment of hinged parts, according to claim 1, characterised in that the ratchet (1') and crown (2') have cogs (4) on all the perimeter of the opposing faces of these parts, while the separator (9') is formed from a piece styled like a ring with projections (14) that lodge in windows (13) set up for this purpose in the crown (2'), this separator (9') being associated with an external control in the shape of a wedge (15) of manual operation.

5. - Mechanism of adjustment of hinged parts, according to claim 1, characterised in that the ratchet (1'') and the crown (2'') have cogs (4) on all the perimeter contour of the opposing faces of these parts and are supplemented by a separator (9'') formed by a ring with a pair of side and external arms (16) in diametrical opposition, each equipped with axial projections (17) that move in corresponding grooves or slots (26) set up for this purpose in the ratchet (1''), while the arms (16) are positioned in complementary housings (18) set up in the crown (2''), all so that the rotation of the ratchet (1'') during the adjustment phase permits the separator (9'') to remain immobile, establishing the different positions between the ratchet (1') and the crown (2') the different positions of folding or adjustment of the mechanism, keeping this position until the projections (17) of the separator limit against one of the ends of the grooves or slots (23) of the ratchet (1''), which causes the dragging of the separator (9') and with it its angular displacement

that will cause the respective push and corresponding axial movement of the ratchet (1'') with respect to the crown (2''), the separation therefore between both parts being produced that will allow the resetting of the mechanism.

6. - Mechanism of adjustment of hinged elements, according to claim 5, characterised in that the housings (18) of the crown (2'') has one of its walls ramped (19) that ends in a flat section (21) with a step (22) from which another flat section is set out (21'') at a higher level than the flat section (21), so that the rotation of the separator (9'') will cause its ascent along the ramp (19) until reaching the flat section (21), this axial movement of the separator (9'') thus causing an axial movement of the ratchet (1'') with respect to the crown (2'') and the disengaging of both parts.

7. - Mechanism of adjustment of hinged elements, according to claims 5 and 6, characterised in that the end or exit of the ramped walls (19) of the housings (18) corresponding to the crown (2'') have a small separator (9'') retention elevation (20) during the resetting of the mechanism preventing the friction effect between ratchet (1'') and separator (9'') referred to.

8. - Mechanism of adjustment of hinged elements, according to previous claims, characterised in that the discoidal part (1-1'-1''), that acts as a ratchet, can be mounted on the fixed item and the discoidal part (2-2'-2''), that acts as crown, can be mounted on the hinged part.